PHILADELPHIA, JANUARY 8, 1876.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON THE SO-CALLED DOUBLE CONGENITAL DISLOCATION OF THE HIP-JOINT.

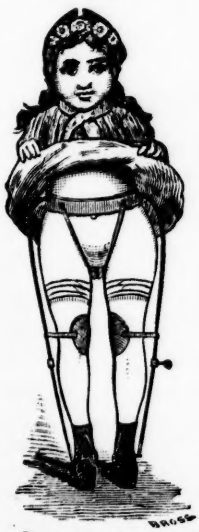
BY LEWIS A. SAYRE, M.D.,

Professor of Orthopædic Surgery and Fractures and Dislocations in Bellevue Hospital Medical College, New York.

Phonographically reported by WILLIAM A. GEORGE.

GENTLEMEN,—The affection we shall first consider to-day is called in all your standard works on surgery "Double Congenital Dislocation of the Hip-Joint;" but I want you to understand distinctly that classification as entirely erroneous. In the first place, to have a bone *dislocated* it must first be *located*, and unless the bone has been located I contend there can be no dislocation; you may have distortion and deformity, but a dislocation, double congenital, of both hip-joints, has never yet occurred. Notwithstanding this, a prominent surgeon of this city has written a work which has been circulated extensively in this country, and received attention from abroad, descriptive of this dislocation.

FIG. 1.



Front view; sketched with instrument on but unextended.

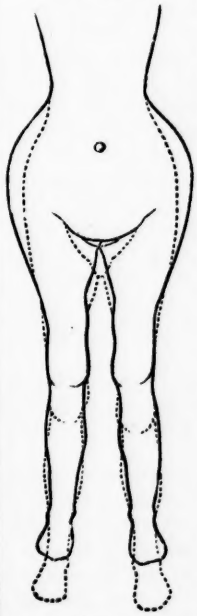
FIG. 2.

Side view; sketched with instrument on but unextended.

Where is the dislocation from? From the acetabulum, you say. But there is no acetabulum here. It is an arrest of development, with its attendant distortion. You might as well speak of the *roof* of a child's mouth that has cleft palate. The true pathology of this disease, then, is that there has been an arrest of development in the bones which contribute to form the acetabulum; that, owing to this non-development, we have a fissured acetabulum; and it is through this fissure that the head of the femur glides upward on the dorsum of the ilium.

In looking at the case, the attention is arrested by the breadth of the hips, the shortness of the legs as compared with the trunk, and the inability of the child to walk or even stand unsupported (see Figs. 1 and 2, sketched and engraved by R. S. Bross, 33 Park Row). Laying the child upon the table, we will first apply Nélaton's test. This test consists in drawing a line from the tuberosity of the ischium over the hip to the superior spinous process of the ilium. This line passes directly over the trochanter major. If the head of the femur be in its socket, there is no fracture of the neck. In this case, even in so small a subject, we find the trochanter one and a half inches above the line. We will next slip this piece of paper beneath the child and pencil on it her form as she lies on the table, and now, pulling her out, see how we increase her length until her trochanter reaches my finger on Nélaton's line; releasing our extension and pushing against her feet, she goes together again,—telescopes,—like pushing a pencil in its case, and the trochanter is nearly two inches above the line. Here, gentlemen, is the paper with the pencillings upon it—a drawing from life,—and you can see the great difference in her form in

FIG. 3.



the extended and shut-up conditions (see Fig. 3).

While Dr. Yale prepares the dressings for her treatment, I will tell you what I propose to do for the case.

This is a most infrequent deformity, but, when it occurs, renders its victim a cripple for life, making youth miserable and maturity hideous. I will show you sometime a specimen—a plaster cast of a young lady suffering from this deformity—in which the distortion was frightful to behold. In that case we could extend the patient four and a half inches, but the moment our extension was relaxed and she assumed the upright posture she would shut up and regain her former appearance.

In this child I propose to arrange something that will keep the limbs extended and prevent their gliding upward, and also to put around the pelvic bones a compress which will assist in holding the heads of the femurs steady and approximate the edges of the fissured acetabulum.

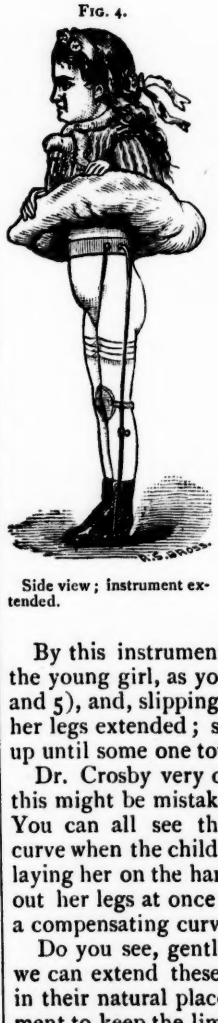
I have seen a fissured palate in an infant which involved the whole roof of the mouth, closed by means of compression. I operated upon this child when it was but three hours old,—perhaps the youngest on record,—by removing the proboscis, bringing the lips together, and applying over the malar bones a U-compress to gradually approximate the edges of the fissure; and now, at twenty-three, he has as good a roof to his mouth as any of you. It is this simple principle, gentlemen, that I propose to put in use in this child. It should have been done at birth; but the child is yet young, and much benefit to it may still be anticipated.

This deformity is seldom detected until the child begins to run about. There is no pain, no inconvenience; the hips are broader, it is true, than normal, but this is looked upon as an evidence of superior development.

This child was sent to me as being a case of disease of the hip-joint; so you see there is a liability to mistake its true nature.

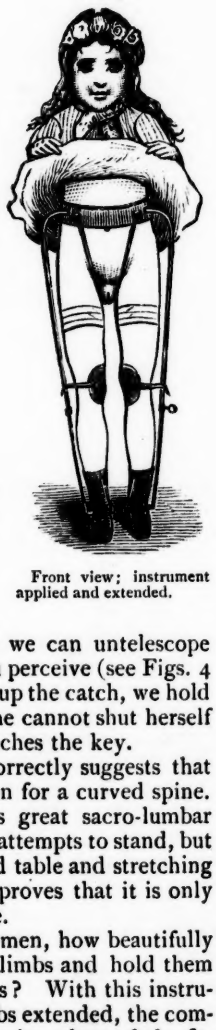
I have had made for this patient, by John Reynder & Co., of Fourth Avenue, a double long hip-splint, capable of extending the limbs and permitting universal motion. It is applied the same as the hip-splint; *i.e.*, adhesive plasters are put on the legs, secured by a roller, with tabs sewed to their lower extremities to which is attached the splint by means of buckles, a pelvis belt, hinged behind and clasping in front, going around the ilii and perineal bands from the pelvic belt in front around the perineal folds, fastening to the belt behind. The instrument is extended by ratchet and key, and held in the extended position by a catch.

FIG. 4.



Side view; instrument extended.

FIG. 5.



Front view; instrument applied and extended.

By this instrument we can untelescope the young girl, as you perceive (see Figs. 4 and 5), and, slipping up the catch, we hold her legs extended; she cannot shut herself up until some one touches the key.

Dr. Crosby very correctly suggests that this might be mistaken for a curved spine. You can all see this great sacro-lumbar curve when the child attempts to stand, but laying her on the hard table and stretching out her legs at once proves that it is only a compensating curve.

Do you see, gentlemen, how beautifully we can extend these limbs and hold them in their natural places? With this instrument to keep the limbs extended, the compress to approximate the edges of the fissure, and a Darrach's wheel-crutch to give her out-door exercise, it is possible we may obtain a good result. In the course of a month or two the child will be returned to us, and we can then see what progress will have been made.

ORIGINAL COMMUNICATIONS.

A CASE OF STRANGULATED HERNIA REDUCED BY THE AID OF ASPIRATION.

BY I. G. HEILMAN, M.D.

THE following case is reported with a view of urging upon the notice of the profession a resource in the reduction of strangulated hernia, which, from its simplicity, safety, and efficiency, is worthy of more attention than it has hitherto received. An analysis of twenty-four cases treated in this manner shows that in no one did bad results follow the puncture, that in all, except where adhesions existed, reduction was accomplished with the greatest ease after the gases and fluids of the tumor had been withdrawn, and that the aspiration in no wise increased the danger of the knife-operation performed immediately afterwards. Indeed, no trace of the puncture was discovered in many of the operations. From my experience with this case, and study of such other cases as I could find reported in the various medical journals, I can but regard the aspirator as a most valuable aid to the taxis. It should be used early,—immediately after a careful and thorough attempt at reduction has failed. As will be seen below, only such instruments as every physician has at hand are needed.

Case.—J. S., aged 30, colored, laborer, has oblique inguinal hernia on the left side, of eight years' standing. Became strangulated November 29, 1875, at 7 P.M. I saw him at 9 P.M. He was then lying on his back, with the knees retracted and the shoulders elevated. The tumor was about the size of a goose-egg, tense and very painful. He vomited frequently, at first the ingesta, and afterwards bilious matter. I attempted reduction, but failed. Applied ice for about half an hour, then administered chloroform, but was unable to replace it. Ordered cold applications to be continued during the night, and morphia to be given in sufficient quantities to relieve the pain.

November 30, 9 A.M., saw the case with Dr. Edw. Stone. We again put him under the influence of chloroform, but were unable to effect reduction. We also tried the method, so highly lauded by some, of suspending the patient by the feet; but this also failed. Continued the application of ice.

At 1.30 P.M. Drs. Stone and L. B. Hall, and myself, found the appearance of the tumor unchanged. There were no symptoms of severe inflammation, and the man's condition was good. He still vomited occasionally and suffered severe pain. It was now decided to try aspiration, and, if this failed, to operate with the knife. As no aspirator was at hand, we improvised one, as follows. An ordinary hypodermic needle was connected, by means of a rubber tube, with the nozzle of a common perfectly air-tight syringe, furnished with a stop-cock. The latter, however, is not essential, as an assistant can close the tube by pressure, as needed. The piston having been depressed, and the needle introduced into the tumor, the apparatus was ready for use. On raising the piston, the intestinal gases filled the syringe. The stop-cock was now closed, the syringe removed, emptied, and reapplied. This process was repeated until the swelling had entirely disappeared. A few ounces of serum, apparently the contents of the sac, were also withdrawn. After the needle had been removed, the slightest upward pressure reduced the hernia. A compress and cold-water dressing was the treatment locally, with opiates internally. The man had no pain at any time after the operation, and his pulse was never more than seventy-six per minute. On the fourth day his bowels moved twice, freely, and he felt so comfortable that he wished to resume his usual work. On the seventh day he was discharged, well.

2032 OXFORD STREET.

OXALATE OF CERIUM.

BY CHARLES K. MILLS, M.D.,

Philadelphia.

Read before the Philadelphia County Medical Society, October 27, 1875.

(Continued from page 151.)

III. CHEMICAL INVESTIGATION OF THE OXALATE OF CERIUM.

IN conjunction with Dr. Henry Leffman, Lecturer on Toxicology in the Jefferson Medical College, I have made an experimental investigation of the oxalate of cerium, being unable to find any satisfactory information in regard to its properties and composition, in works either on chemistry or on materia medica and therapeutics. I will only give here such of our observations as seem to be of value to the physician and pharmaceutist.

1. *Structure.*—Under a powerful microscope the pure oxalate of cerium from neutral solution showed no evidences whatever of crystallization. It looked like a white spongy mass, its individual fragments being much smaller than those in the other specimens. The chemically-pure from acid solution, and the commercial article, gave nearly the same appearances.

Their granules were slightly irregular, but more or less spherical and of uniform size. While they exhibited brilliant points of light, they, nevertheless, showed no particular signs of crystallization.

2. *Fineness of powder.*—The three specimens of oxalate differ considerably in their degrees of fineness. We established this point by elutriation, a process of diffusing a powder in a clear liquid, and observing the completeness and period of subsidence, and by determining the relative weights of the same bulk of the various preparations. The chemically-pure oxalate from neutral solution is a curdy impalpable powder, somewhat resembling flour or bleaching-salt. The pure from acid solution and the commercial are much coarser; they are more gritty or granular. They vary in their states of molecular aggregation. Filling a small tube to the same height with each powder, and weighing, we obtained the following:

	Weight.	Per cent.
1. C. P. from neutral sol.,	1.61 grms.	1.00
2. C. P. from acid sol.,	2.58 grms.	1.60
3. Commercial,	2.06 grms.	1.28

The difference in molecular condition, shown by this weighing, can be easily appreciated by examining the three bottles upon the table, which contain respectively one ounce of each preparation.

3. *Reduction of the oxalates to oxides.*—By igniting pure oxalate of cerium, obtained by precipitation from neutral solution in an open vessel, ceroso-ceric oxide is produced. It is a fawn- or buff-colored powder, resembling the impure carbonate of zinc, or calamine. The oxalate precipitated from acid solution gives, on similar ignition, an oxide a little darker in color, more of a salmon tint. The commercial or mixed oxalate of cerium, lanthanum, and didymium, under the same process, results in a red-brown or rust-colored oxide. The degree of purity of a specimen could, therefore, be approximated by simply roasting the oxalates. The oxide derived from pure oxalate of lanthanum is white, while that obtained from pure oxalate of didymium heated in the air is dark brown; facts which will help to explain the differences in color between the commercial and pure oxalates of cerium.

4. *Solubility.*—Pure oxalate of cerium is one of the most insoluble bodies known to the physician. We could not produce a simple solution of it in water, alcohol, ether, chloroform, hydrochloric acid, nitric acid, caustic soda, or caustic potash, although some of the more powerful of these agents, with the assistance of heat, decomposed it. It is somewhat soluble in sulphuric acid, the addition of which at first produced a gelatinous mass. What is true of the oxalate is also true of the pure oxide obtained by roasting. According to Fresenius, if pure hydrochloric acid be added to the oxide of cerium, and the mixture boiled with the addition of alcohol, solution will take place; but we could not obtain this result, and concluded that the oxide used by him was not absolutely pure. Even adding such powerful reducing agents as the sulphite and hyposulphite of sodium would not bring about solution, the oxide remaining almost untouched in the capsule. By boiling the pure oxalate for an hour in caustic soda and filtering, a bluish-gray powder was obtained,—probably the protoxide or a basic oxalate of cerium,—which dissolved in boiling hydrochloric acid.

The commercial oxalate would not dissolve in water, alcohol, ether, or chloroform, but yielded more readily to sulphuric acid than the pure salt, and dissolved, probably with decomposition, in hydrochloric and nitric acids, and the caustic alkalies, with the aid of heat. The greater solubility of the mixed oxalates might, perhaps, afford an argument in favor of the use of the oxalates of lanthanum and didymium.

We found that both the pure and the commercial oxalates were insoluble in an artificial gastric juice.

5. *Non-passage into the urine.*—We made two experiments to determine whether the oxalates, pure or commercial, passed into the urine. Twenty grains of the drug were taken during the course of thirty-six hours. The urine eliminated during this time was boiled down, and the residue dried, calcined, treated with nitro-muriatic acid, and then examined by the cerium tests and by the spectroscope for didymium. We could not detect either of the oxalates in the urine.

6. *Composition of commercial and of chemically-pure oxalate of cerium.*—We made many attempts to analyze specimens of commercial oxalate of cerium, but found the processes given in Gmelin, Watts, and Crookes all more or less defective. Among the methods tried were those of Mosan-

der, Pattison and Clarke, Wolcott Gibbs, Winckler, and Watts. Comparatively little is known about the cerium metals, and their compounds are difficult bodies with which to work. We confined our efforts chiefly to the separation of cerium from the lanthanum and didymium. All the analytical processes employed are based chiefly upon the fact that the compounds of lanthanum and didymium are more soluble than those of cerium. I will give our mode of procedure in the three methods with which we were most successful: (*a*) The commercial oxalate was first roasted, and the mixed oxides resulting heated with strong hydrochloric acid, which brought about solution. The solution was precipitated with caustic potash or soda, and chlorine passed through the liquid in which the precipitate was suspended. The chlorine dissolved the oxides of lanthanum and didymium, but left the oxide of cerium in the form of a bright-yellow precipitate. This process was repeated several times, completely saturating with chlorine. The liquid was then filtered, the washed precipitate treated with strong boiling hydrochloric acid, and the solution thus formed with oxalic acid or oxalate of ammonia. (*b*) The mixed oxides were boiled for several hours in a strong solution of chloride of ammonium, to dissolve the oxides of lanthanum and didymium. The pure ceroso-ceric oxide left was collected on a filter, washed with a solution of chloride of ammonium, and treated as in the first method. (*c*) The mixed oxides were treated first with dilute and then with strong nitric acid, repeating the process, which gradually removed the whole of the oxides of lanthanum and didymium, after which we proceeded as in the other methods.

We obtained somewhat varying results by these three methods, but all sufficiently near to one another to indicate their general accuracy. Their average gives the following as the probable composition of commercial oxalate of cerium:

	Per cent.
Oxalate of cerium	63
Oxalates of lanthanum and didymium	37
	100

Different specimens of the commercial oxalate vary in composition, but this percentage will serve to convey an idea of the large amounts of lanthanum and didymium usually present. According to Mayer (*Am. Jour. of Pharmacy*, January, 1860), the oxides of the cerium metals amount to 67 per cent. of the mineral cerite, the oxide of cerium making up about three-fifths of that proportion, a result which approximates closely to the average of our analyses. The same authority gives the following as the composition of pure oxalate of cerium:

	Per cent.
Oxide of cerium	46.14
Oxalic acid	30.78
Water	23.08
	100.00

7. *Tests for cerium.*—*a.* Dissolve the salt to be examined in nitric acid diluted with its own volume of water, add a small quantity of the pure peroxide of lead, and boil for a few minutes, when the smallest trace of cerium can be detected by the yellow color of the solution. *b.* Roast the oxalate until it is converted into ceroso-ceric oxide, and then dissolve in excess of hydrochloric, nitric, or sulphuric acid, with the assistance of heat if needed. To the solution thus formed add excess of caustic potash, and a gelatinous hydrate will be thrown down. Submit this to the action of chlorine, and a lemon-yellow precipitate will appear. *c.* The following test, which is not given in the books, is still better, from its more ready application. Agitate the gelatinous hydrate, obtained as in the last test, with a little bromine, when the lemon-yellow color of ceroso-ceric oxide will immediately be seen.

8. *Spectrum test for didymium.*—The presence of didymium in a cerium preparation can be readily detected by means of the absorption-spectrum referred to in the letter of Professor Morton. If a glass vessel containing a weak solution of the commercial oxalate of cerium is placed directly in front of the slit of a spectroscope directed towards a bright light, a brilliant spectrum crossed by two dark bands becomes visible on looking through the instrument. These are the absorption-lines or bands of didymium; one, extremely well marked, in the yellow immediately following Fraunhofer's line *D;* the other, easily seen, but not so boldly defined, between *E* and *b*. This test is so delicate that these characters can be distinctly made out in a solution, half an inch deep, of only 0.01 per cent. of didymium salt. These bands have been made the subject

of research by Bahr and Bunsen, Gladstone, and others, and are now being thoroughly investigated by Morton. In the investigations of Dr. Leffmann and myself, we frequently used the spectroscope to determine the presence or absence of didymium, and to help settle points in regard to the solubility of the commercial oxalate of cerium.

IV. THERAPEUTICS.

1. *Medical history and uses.*—The introduction of the oxalate of cerium into medicine dates back only seventeen years. Prof. J. Y. Simpson first directed attention to its striking therapeutic powers (*Med. Times and Gazette*, Sept. 17, 1859). He recommends it as the simplest and surest of all remedies for the nausea and vomiting of pregnancy. Dr. Charles Lee (*Am. Journ. of Med. Sciences*, Oct. 1860) found it particularly useful in the vomiting of advanced pregnancy, and of phthisis, and hysteria; in pyrosis, and in various dyspeptic conditions. Dr. W. H. Jones (*Chicago Med. Journ.*, Feb. 1861) reports five cases of the vomiting of pregnancy in which he employed it successfully. Albert Lloyd (*Lancet*, Nov. 30, 1861) speaks favorably of it in the vomiting of pregnancy, giving one case. George Selwyn Morris, in the same number of the *Lancet*, refers to six cases of the sickness and retching of pregnancy in which it was used by him unsatisfactorily. Three of his cases, however, were relieved. "W. C. F." (*Med. Times and Gazette*, Jan. 11, 1862) reports a case of the vomiting in laryngeal phthisis benefited by it. J. W. Curran (*Med. Press and Circular*, July 14, 1869) claims that no other drug has as permanent and salutary effect in the vomiting of pregnancy. Dr. S. A. Lucas (*Med. Press and Circular*, Aug. 4, 1869) employed it successfully in vomiting from various causes. Edwin Bush (*British Medical Journal*, Nov. 27, 1869) was never disappointed with it in the sickness of pregnancy, and invariably found it a good remedy in persistent irritable stomach from uterine disturbance in unmarried females and in the absence of pregnancy. Dr. F. K. Bailey (*Med. and Surg. Reporter*, Jan. 9, 1875) states that he has used it with gratifying results in the sickness of pregnancy, and in chronic gastric affections, since 1860. He could not remember a single failure when given for the vomiting in pregnancy. He sometimes combined it with subnitrate of bismuth; and he mentions a case in which a patient had vomited a quantity of small lumbrici, and in which great relief was afforded by santonin, bismuth, and oxalate of cerium, followed by castor oil. Tanner, in his "Signs and Diseases of Pregnancy," says that it has disappointed him. In Cazeau's Midwifery a case is mentioned in which it failed. Works on materia medica and therapeutics devote scant space to it, or ignore it, although it is officinal in the Pharmacopœia.

I have brief details of sixty cases in which oxalate of cerium was prescribed. As the chemically-pure and commercial articles are given in the same doses, simply differing slightly in their degrees of efficacy, it will not be necessary, as I proceed, to particularize the specimen employed. I will give my results in tabular form, with general explanations:

	No. of Cases.	Permanent Relief.	Improvement.	Failure.
Nausea and vomiting of pregnancy	11	10	1	
Nausea and vomiting of uterine disorders	3	2	1	
Nausea and vomiting of hysteria	5	4	1	
Vomiting associated with neuralgia	2	1	1	
Vomiting of phthisis	2		1	1
Vomiting of typhoid fever	4	4		
Vomiting and diarrhœa of dentition	5	5		
Dyspepsia	15	6	7	2
Diarrhœa	3	1	2	
Dysentery	1			1
Gastric ulcer	5		3	2
Chronic gastritis	2		1	1
Scirrhous cancer of pylorus	1			1
Enteritis	1			1

It will be seen that the cases given are all instances of disorders of the alimentary tract. I have successfully administered both the oxalate and the nitrate of cerium in chorea and other neuroses; but I prefer to postpone any consideration of their usefulness in such affections until my experience in this direction has been larger.

The nausea and vomiting of pregnancy almost always yielded with promptness to a few doses of the oxalate of cerium; and by a continuance of the remedy the symptoms could be kept in check. Two of the cases relieved would come properly under the grave vomiting of pregnancy; the rest were the ordinary simple form of nausea and vomiting. In some cases the benefit afforded was magically prompt. Occa-

sionally relapses occurred; but a recurrence to the drug soon set matters right again.

In the nausea and vomiting and irritable stomach so often found associated with amenorrhœa, dysmenorrhœa, prolapse, flexions, and other disorders of the uterus, and with hysteria dependent upon psychical and general physical causes, such as grief, care, anxiety, overwork, and the like, the oxalate of cerium is one of the most efficient remedies in the materia medica.

In two cases of vomiting, associated with severe facial neuralgia (not migraine), the oxalate was prescribed with success, in one instance relieving the symptom entirely, the neuralgia also disappearing without other treatment; in another the vomiting was checked on several occasions, but galvanism had to be evoked for the removal of the neuralgic affection.

I gave the oxalate in two cases of obstinate vomiting occurring during the progress of phthisis; in one of which it effectually stopped the vomiting, but in the other failed. According to Dr. George B. Wood, the obstinate vomiting of phthisis is sometimes the result of chronic gastritis, the signs of which can be found after death, whereas in other similar cases no marks of inflammation can be discovered, the disorder of the stomach being simply functional or reflex. It is probably in the latter class of cases that the oxalate of cerium proves most useful.

Vomiting and sickness of the stomach are symptoms sometimes present at various stages of typhoid fever, and in four cases of this kind the oxalate of cerium afforded prompt relief. One of these cases was complicated with pregnancy of seven months' duration, the vomiting being exceedingly obstinate. Another very grave case was entirely relieved of the vomiting, but died a few days later from the effects of a violent purge administered without orders. Three of the cases recovered.

Small doses of the oxalate of cerium, say about the one-fourth of a grain, given early and often in cases of vomiting and diarrhœa attendant upon the evolution of teeth in infants, are highly efficacious. Besides the cases given in the table, Dr. A. K. Minich, of this city, has kindly placed at my disposal the histories of ten cases of these intestinal disorders of infants and young children in which he used the oxalate of cerium with striking success. It seems to act well in those cases in which bismuth, pepsin, or opium is sometimes beneficial.

Fifteen cases are classed in the table as dyspepsia, of which six were permanently relieved, seven improved, and two unsuccessfully treated. The cerium salt seemed to act with most efficacy in those cases in which morbid sympathetic influences, so called, played an important part in producing the indigestion, probably where depressed or deranged innervation of the stomach existed. On the whole, it is perhaps better adapted to relieve the various incidental affections which occur in the course of dyspepsia, such as acid regurgitations, cardialgia, tympanites, and vomiting, than it is to thoroughly cure the disease. It might, perhaps, be advantageously used with the bitter tonics.

The case of diarrhœa in which the oxalate of cerium proved successful was due to nervous excitement. The two cases palliated were the result of indigestion.

In dysentery, gastric ulcer, chronic gastritis, pyloric cancer, and enteritis, my experience with the drug under consideration has not been very encouraging; but, as in some cases it palliated severe symptoms, it is, I think, worthy of a more extended trial in these disorders.

2. *Mode of action.*—The exact mode in which oxalate of cerium produces its effects has not with certainty been determined. Professor Simpson considered its action on the stomach to be that of a sedative tonic, somewhat similar in its operation to the salts of silver and bismuth. Professor Stillé concludes that its efficacy is proportioned to the predominance of the nervous element in those cases of vomiting in which it has proved beneficial. In Pereira's "Materia Medica and Therapeutics," American edition, it is suggested that from its insolubility it probably acts simply as a local protective. It seems to me to have the power of diminishing the reflex excitability of the alimentary tract. Most of the cases in which I have found it serviceable, as will be seen from the table and explanations given, are illustrations of reflex or so-called sympathetic nervous phenomena. It does not seem to answer so well in cases of inflammation or structural lesion of the digestive canal.

The insolubility of the oxalate of cerium is not absolute proof that its operation is simply mechanical. It may be true as a

general law that insoluble bodies are not regularly absorbed; yet, directly or indirectly, they sometimes appear to bring about constitutional impressions. Some have supposed that insoluble substances, if minutely divided, may pass into the circulation. Orfila says that he detected the nitrate of bismuth, administered by the stomach, in the liver and spleen, and in the urine (Stillé's Therapeutics, vol. i. p. 185). Oesterlen (Stillé's Therapeutics, vol. i. p. 52) administered to animals finely-pulverized charcoal, and under the microscope found particles of it in the blood. It is quite possible that a preparation which is insoluble out of the body may dissolve in it under the stimulus of active digestion, or a chemical circulation may perhaps take place through the tissues. A portion, at least, of the effects of some remedies seems to be due to their direct operation upon the superficial nerves of the stomach.

3. *Administration.*—The dose of oxalate of cerium for an adult is from one to five grains; for an infant or small child, from one-fourth to one-half a grain. I have given as high as six grains, but have most usually prescribed it in doses of two or three grains, these amounts sufficing generally for those cases which seem to be amenable to its remedial influence. It may possibly be used with advantage in larger doses than these; but experiment has not yet settled the limit of its maximum employment, and it is perhaps better to restrict its administration to the amounts mentioned. In two instances in which it was ordered in doses of five and of six grains, it appeared to cause slight gastric uneasiness and diarrhœa; but these may have been accidental occurrences. It is most readily administered in the form of powder or of pill. If powders are prescribed, it may be given alone, or rubbed up with sugar of milk, powdered gum arabic, gum tragacanth, or some similar article. By trituration the fineness of the commercial oxalate, and of the chemically-pure from acid solution, can be much increased; and I believe that they act more promptly after they have been submitted to this process. It may be made into pills with any of the vegetable extracts, such as extract of gentian, quassia, lupulin, hyoscyamus, etc.; or, if it is desired to give it alone, the pills may be made up with syrup of acacia, glycerin, or concentrated honey, the latter being one of the best excipients for the purpose. Its insolubility renders its administration as a liquid preparation generally unadvisable, but it may be suspended pretty well in mucilage of acacia and simple syrup.

A CASE OF TUBERCULOUS KIDNEY.

BY GEO. STILES, M.D.

MRS. J. P., age 24,—maternal grandmother died of phthisis,—came under my care in June, 1875, with a history of continued ill health for two years following a severe labor.

Physical exploration of chest discovered no pulmonary lesion; there was no cough, no expectoration; tongue dry and covered with white fur; complete anorexia, pain more or less constant and severe in right lumbar region; troublesome diarrhœa; incontinence of urine, and great emaciation; had never menstruated since birth of child.

Her inability to retain the urine made it difficult to obtain any for examination. When obtained and examined, it was found to contain some pus and altered blood-corpuscles, and was exceedingly acid in its action. The diarrhœa was mostly at night. The discharge contained particles of undigested food. She was placed upon iron, quinia, and strychnia, with opium suppositories. Upon this treatment she seemed to improve, and by the aid of a very ingenious apparatus made by Mr. Seeley, of Philadelphia (to hold the dribbling urine), she was enabled to be about and take out-door exercise. She continued to improve until September 20, when she suffered from a severe prolonged colliquative diarrhœa, having as many as ten evacuations in twenty-four hours. Opiates and astringents of various kinds were given, which, however, seemed to have little beneficial effect. By the 20th of October her emaciation was extreme. It was with difficulty that food in the smallest quantities could be retained, so irritable had the stomach become. Pain was constant, severe, and diffused over the whole abdominal region; sleep could be obtained only by opiates, which were given in suppositories. Brandy, milk, and beef-essence, with astringent injections, made up the treatment. Her condition thus remained, with little alteration, until November 8, when dropsy of the lower extremities developed itself; the pain in the right lumbar region became more severe, accompanied with nausea and vomiting and great thirst; the diarrhœa excessively profuse; skin cold; face sunken and pale. There was also marked wakefulness, the patient lying mostly on the back, because any other position caused great dyspnœa. On the 12th she became quite delirious, and so remained until the morning

of the 14th, when she was seized with convulsions, in which she died.

The following results were revealed by the autopsy:

Body much emaciated.

Heart normal; pericardium contained about one ounce of clear, straw-colored serum. Tubercular deposits at the apex of both lungs, but no cavities.

The abdominal cavity contained about one pint of normal serum.

The right kidney was enlarged, measuring four and a half inches in length and three inches in width, and was almost entirely disorganized, numerous cavities, varying from the size of a grain of corn to that of an English walnut, being disseminated through its substance. Other foci were occupied by a caseous substance. The parenchyma between these local evidences of diseased action was chronically inflamed. Extensive perinephritis was present. The dense, unyielding mass resulting extended from the iliac fossa to the diaphragm. The capsule of the kidney was entirely lost within it.

The vermiform appendix and cæcum were so fixed to the iliac fossa that they had to be dissected from their bed. The ascending colon, duodenum, and corresponding suprarenal capsule were also adherent, and in a less degree the gall-bladder, and the under surface of the right lobe of the liver. The left kidney was free from deposit, but was hyperæmic; it was slightly larger than the right. The corresponding ureter was dilated and was full of clear urine; it measured transversely about one-third of an inch. The bladder was the seat of chronic cystitis; the viscus was empty. Circumstances attending the post-mortem prevented more extended examination of the abdominal organs. The intestines were not opened.

Conshohocken, Pa.

A VISIT TO PROF. W. BOECK'S WARDS OF SYPHILIZATION, IN CHRISTIANIA, NORWAY.

BY K. T. STABECK, M.D.,

Davis, Ill.

IN 1875 I went to Christiania, in Norway, to observe for myself the treatment of syphilization, which is carried on to such large extent by Prof. W. Boeck, at his syphilitic wards. Your readers are too well acquainted with what syphilization is to require any recapitulation of its *modus operandi*. Upon my arrival I found a large ward exclusively used for patients suffering from venereal diseases, under the supervision of Prof. W. Boeck. Every patient who is admitted is examined by the professor, and if constitutional syphilis is found he is asked if he has ever been treated with mercury or iodide of potassium. If he has not previously been treated with these ingredients, he is at once inoculated by a fresh virus from a chancre of some other patient in the ward. If he has previously been treated by the above-mentioned drugs, the professor hesitates to put him under the treatment of syphilization. The treatment is carried on to an enormous extent. Careful statistics are kept at the hospital, showing the result of the treatment, and I must admit that by my careful observation during the whole summer I find the result of this treatment by the professor proves a remarkable success. I asked the professor why he had met so much opposition. His reply was invariably that his opponents never gave it a fair trial, and, further, that inexperienced men who were not thoroughly acquainted with the requirements of the cure would condemn it before giving it a fair trial. It has proved a success to him, he says, during a period of twenty-five years in which he has practised it, and it can for others if properly carried out. In his "Recherches sur la Syphilis," published in 1875, he shows in his statistics that there is thirty per cent. in favor of syphilization. His way of treating the bubo is indeed a good and successful mode. When the bubo is formed he will take it with his thumb and forefinger, raise it up as far as he can, and insert a probe, with which instrument he will break up the inflamed gland into a mass, and then, with a steady pressure, squeeze out the contents of the bubo; immediately after, he places a piece of surgeon's plaster over the opening made, and in the majority of cases this treatment proves very satisfactory.

NOTES OF HOSPITAL PRACTICE.

SERVICE OF PROF. D. HAYES AGNEW, AT THE UNIVERSITY HOSPITAL.

Reported by Dr. J. William White.

FATTY TUMOR.

IN this patient, a woman, æt. 28, you observe a tumor occupying the shoulder and the posterior portion of the base of the neck. When I take hold of it you notice that it is perfectly mobile, and can be moved in every direction, being adherent neither to the skin nor to the subjacent parts. It is lobulated, being composed of

masses, which become more distinct when pressure is made, and which are separated from one another by prolongations of connective tissue. On palpation, the tumor has a doughy feel, and on percussion there is almost a sensation of fluctuation. It has taken eight years to attain its present size. The bluish color of the skin covering the tumor and the reticulation of veins which crosses it are the only points in which it has the slightest resemblance to a malignant growth, and these appearances are simply mechanical results of the pressure made by the mass upon the veins at the root of the neck. When we consider its mobility, its lobulation, its consistence, and its slow rate of growth, we recognize at once that it is a lipoma, or fatty tumor, a simple hypertrophy of the adipose tissue of this region. These tumors are never dangerous, and usually give trouble only by their bulk and the pressure they exert upon adjacent nerves and blood-vessels. They are sometimes encapsulated, in which case they can be readily enucleated, but often, as in the present instance, it is necessary to dissect them out with care. The tumor having been removed, we bring the skin-flaps together with a few stitches, apply a compress over the shoulder, and make gentle but firm pressure upon it by means of a Spica bandage. We endeavor in this way to make the flaps fit as accurately as possible over all the inequalities beneath, and to prevent oozing of blood under them,—points which are often neglected, but which are of primary importance in the successful after-treatment of such cases. If a large quantity of blood should escape beneath these flaps, we would find it acting as a foreign body, setting up inflammation and suppuration, and, possibly, producing a troublesome abscess.

SCIRRHOUS TUMOR OF BREAST.

We have here a woman, æt. 45, who is the subject of a disease which is very common among females, and is particularly apt to make its appearance at about her time of life, or the period of the menopause. She has a tumor situated near the axillary border of the left breast; it has the bluish color and the venous reticulation to which I called your attention in the last patient, but here we find that the tumor is dense and hard, that it is firmly adherent to the skin, and has but little mobility; that it has grown to its present size in three years, and that it has a strong tendency to ulceration. We see that the nipple is markedly retracted,—a very characteristic symptom of such tumors,—which is due to inflammatory shortening of the lactiferous tubules which run up to the little ampulla or reservoir situated at its base. When this tumor had reached a later stage of development, if it were allowed to remain there would almost certainly be extensive ulceration of the skin overlying it, followed by the projection of unhealthy and fungous granulations. The neighboring glands, too, would doubtless be involved, the axillary, clavicular, and supra-clavicular, and then the only possible inducement to operate would be to relieve the patient temporarily of an offensive, painful, and ulcerating surface. There would be no reasonable prospect of doing more than simply adding to her comfort, the return of the disease being inevitable. In the present case, however, there is no involvement of any gland but the one primarily affected: so we proceed at once to its removal, taking great care not to leave any nodules of cancerous tissue to form nuclei for new growths in the future.

MYELOID TUMOR OF THE UPPER JAW.

In this patient, a woman, 24 years of age, you will notice a tumor situated exactly in the middle of the upper jaw and involving a portion of each superior maxillary bone. This is an *epulis* or an *epuloid growth*, the term being a generic one, referring to the situation of the tumor upon the gum, and including growths which are mere indurations of the mucous membrane, others which are papillary or periosteal, and still others which, as in this case, are myeloid, and spring from the cancellous tissue of the bone itself. These tumors have a certain local malignancy, showing a strong tendency to recurrence after removal. It is always necessary to extirpate the whole of the affected portion of the bone, for, if this were not done, the disease would almost certainly return. After reflecting back the upper lip, we make with a straight saw a vertical section of the bone on either side of the tumor, and then, with a pair of cross-cutting forceps, remove the growth and the bone to which it is attached. The bleeding in this case is readily checked by the application of a plug of lint, but sometimes it is profuse and dangerous, so that the actual

cautery should always be in readiness to be used if necessary.

FISTULA IN ANO.

We have here a man, æt. 40, whose ailment commenced with a soreness at the verge of the anus, followed by redness, swelling, and a discharge of pus. In such cases, or even when there is simply a mass of indurated tissue in the same region without inflammatory symptoms, you may expect to find a fistula, or several fistulæ, which may be *complete*, that is, communicating with both the bowel and the surface of the body, or *incomplete*, having only one opening. Very important offices have been attributed to fistulæ. They have been thought to be the means of discharging from the system various morbific materials, especially in cases of phthisis pulmonalis. I have never seen any such salutary effects exerted by them in disease of the lungs, or in any other disease, and the only question which I ask myself is whether the patient's general health is good enough to warrant the operation. Neither have I ever observed any bad effects follow its performance in cases of pulmonary disease. In performing the operation, the most convenient position in which to place the patient is upon one side, with the lower limb perfectly straight and the other strongly drawn up. This position I have found to answer every purpose. The operation consists simply in dividing the fistula by the knife, and allowing it to heal up from the bottom. If there are numerous sinuses, great care should be taken to divide all of them, or the operation will be useless. If ligatures are used, the wound will usually heal as the ligature cuts its way out, so that when that process takes place slowly we may expect to find that almost entire union has taken place. After the operation, a compress and a T-bandage are applied, and are left undisturbed for two or three days, during which time the bowels should be kept closed. A mild cathartic is then given, and ordinarily the case progresses to recovery with but little further necessity for surgical care.

ATROPIA AS A TEST OF DEATH.—Statsarzt Michaelis has found that the action of atropia upon the pupil is not a reliable test of death. In several cases its influence was very marked in recent corpses.—*Wiener Med. Presse*, November 28, 1875.

TRANSLATIONS.

FOREIGN BODY IN THE ŒSOPHAGUS (*Le Mouvement Médical*, October 16, 1875).—M. Maurice Perrin relates an interesting case. A child eight years of age had swallowed a sou, and was brought to him some hours afterwards. She swallowed saliva easily, respired freely, and presented no other symptom than pain at the upper portion of the neck. Exploration by the ordinary means did not reveal the presence of any foreign body in the œsophagus, vomiting caused the expulsion of none, and neither any sound nor obstruction was noticed on the introduction of an olivary bougie. Imagining that the sou might be resting on the anterior wall of the pharynx, and in some manner covered in or enfolded, he practised the following manœuvre. Having inclined the child's head strongly forward, he introduced his finger as deeply as possible into the buccal cavity, so as to produce at the same time a depression of the tongue and efforts at vomiting, and also to make the anterior portion of the pharyngo-œsophageal tube the lower. This was completely successful, the piece of money being projected upon the floor at the first attempt to vomit. J. W. W.

NEW REMEDIES IN CHOREA.—Under this title a writer in *La France Médicale*, November 20, gives some account of the nature and uses of hyoscyamin and sulphate of eserine.

Investigations into the action of hyoscyamin, made some years ago, by Oulment and Laurent, show that this drug influences more especially the sympathetic nervous system, causing vascular paralysis in large doses. Upon the heart it first regulates, then diminishes, and finally arrests pulsation. In toxic doses peripheric sensation is blunted. The general phenomena observed under the use of hyoscyamin are due to its influence upon the circulation; this passes rapidly off, the drug being eliminated by the urine. M. Oulment administered hyoscyamin in doses of one-sixtieth of a grain (one milligramme) in pill form, at first twice daily, then more frequently, until saturation of the system was obtained. The dose was then continued cautiously. Amelioration in the chronic symptoms began towards the eighth or ninth day of treatment, and steadily continued. X.

MASKED PALUDAL FEVER,—APOPLECTIC

AND THORACIC SYMPTOMS, FOLLOWED BY NEURALGIA, PARALYSIS, AND CONSECUTIVE ATROPHY OF THE REGION SUPPLIED BY THE LEFT ULNAR NERVE.—M. Bide communicates notes of the following case to *La France Médicale*, November 17, 1875. A young man, 25 years of age, Canadian by birth, but long resident in Algeria, was found, after a short period of malaise, insensible in his room. Brought to the Hôpital de la Charité, the diagnosis of violent paludal fever with pectoral implications was made. The patient was insensible, the spleen was much enlarged, and there was some congestion of the lung, with pleurisy and slight pericarditis. His general appearance betokened profound malarial poisoning. About two weeks after his admission to the hospital he complained of numbness, formication, and twitchings in the ring and little fingers of the left hand. Chills and fever succeeded each other for some days, for which quinine and arsenic were administered. Pain in the fingers mentioned continued, together with difficulty in moving them, and also shooting pains along the course of the ulnar nerve were noticed.

A few days later an ulcer the size of a five-franc piece showed itself on the left heel, surrounded by a red border. As the patient improved, this ulcer became gradually cured, but the pains in the fingers continued, though less severely. The left arm gradually became atrophied to a certain degree, the hand still more so. The first interosseous space seen on the dorsal side was completely obliterated, the other spaces had disappeared in part, the whole hand was atrophied. The left fore-arm also was markedly diminished in size.

The patient could move the affected fingers, but stated that, though the ring finger had recovered its sensibility, the little finger was always completely insensible, and was subject at times to painful formication. The fever having been cured, the patient left the hospital at the end of three months, with his hand and arm in the condition described. X.

INTESTINAL OCCLUSION CURED BY ELECTRICITY (*Bulletin Général de Thérapeutique*, November 13, 1875).—In a case of intestinal occlusion, occurring in a washerwoman 54 years of age, and probably the result of gastric disorders, Dr. Dal Monte obtained a complete cure by means of electricity. The phenomena of occlusion had already lasted fifteen days, and injections and purgatives had been freely employed without avail. An electro-magnetic apparatus was used, one pole being introduced into the rectum, and the other passed by means of a wet plate over the abdomen. The first application, which lasted ten minutes, was followed by an abundant emission of gas, and after the second a similar discharge occurred, followed by the passage of large quantities of fecal matter.

Several similar cases have been reported, and this plan of treatment, which is free from danger, should always be tried before an operation is advised. J. W. W.

ARTIFICIAL ANUS IN CASES OF TUMOR OF THE RECTUM (*Bulletin Général de Thérapeutique*, November 13, 1875).—After having carefully studied the different lesions which may lead to a more or less complete obstruction of the rectum, Dr. E. Richard arrives at the conclusion that the operation for the production of an artificial anus should be practised not only when the patient has arrived at that stage of his illness when he is only able to pass very small quantities of liquid fæces, but also whenever the physician foresees that this result is inevitable. He considers its performance an absolute duty whatever may be the nature of the tumor which obstructs the rectum, and asserts that the many successes obtained in this manner and the few difficulties of the operative procedure encourage him to believe that it will be much more frequently employed in the future than it has been heretofore. J. W. W.

TEPID BATHS IN THE FEBRILE DISEASES OF VERY YOUNG CHILDREN (*Bulletin Général de Thérapeutique*, October 30, 1875).—M. Meyer has employed tepid baths in the treatment of children under one year, affected with pneumonia, erysipelas, dothinenteritis, and, in fact, in all cases of diseases attended by a high temperature. As soon as the temperature in the rectum exceeds 30.5° Cent. the baths should be employed; but it is never necessary, at least without some special indication, to lessen the temperature of the bath below 29° Cent. In the greater number of cases, M. Meyer has employed successfully baths of a temperature varying from 34° to 29° Cent. J. W. W.

FORMULÆ FOR USE IN GONORRHŒA (*Le Progrès Médical*, November 6, 1875).—In cases of gonorrhœa, when the marked

inflammatory symptoms have disappeared or have notably diminished, Rollet recommends the following injection:

℞ Liquor. plumb. subacetat., f℥i;
Zinci sulphat., gr. vj;
Vini opii, f℥ss;
Aquæ dest., f℥vj.
M. et ft. sol.
Use from three to five times daily.

As an enema in cases of painful erections and chordee, Ricord advises the use of the following mixture in conjunction with emollient and diuretic drinks and prolonged baths:

℞ Pulv. camphoræ, gr. viii;
Extract. opii, gr. ss;
Vitell. ovi, i;
Decoct. lini, f℥i.—M.

J. W. W.

COLLODION FOR USE IN FRECKLES (*Bulletin Général de Thérapeutique*, October 30, 1875).—A solution of corrosive sublimate either pure or mixed with cyanide of mercury is commonly employed for the removal of freckles; but a collodion containing ten per cent. of its weight of sulpho-carbolate of zinc has given excellent results without being accompanied by any of the dangers attending the use of the mercurial solution. The following formula is an excellent one:

Sulpho-carbolate of zinc, 1 part;
Collodion, 45 parts;
Oil of lemon, 1 part;
Absolute alcohol, 5 parts.

The sulpho-carbolate of zinc should be reduced to an extremely fine powder, and should then be thoroughly incorporated with the fluid mixture. J. W. W.

OUTWARD LUXATIONS OF THE HEAD OF THE RADIUS, AND THEIR TREATMENT (*Bulletin Général de Thérapeutique*, October 30, 1875).—Dr. Boularan has carefully studied the outward luxations of the superior extremity of the radius, which are very rare, occurring, however, more frequently in infancy and childhood than later. In the large majority of cases this dislocation is produced by a fall upon the elbow. The displacement cannot be complete without a rupture of the lateral, external, and annular ligaments.

The functional symptoms are not markedly characteristic, but may be variable. Reduction will be almost always easy, but retention is very difficult, and can only be secured by complete and long-continued immobility. In spite of this difficulty, the prognosis is never grave, as extension and flexion usually return almost completely; generally, however, supination remains very limited. In all cases the restriction of movement diminishes with time, and some patients even regain the entire range of movement of the fore-arm. These facts are important in determining the prognosis of such cases. J. W. W.

NEW METHOD OF ARRESTING THE ACTION OF THE HEART OF THE FROG (*Centralblatt für die Med. Wissenschaften*, No. 44, 1875).—Tarchanoff (*Gaz. Méd.*, 1875, No. 151) states that if a knuckle of the intestine together with the mesentery belonging to it be drawn from the abdomen through a wound of the parietes of that cavity, and allowed by exposure to the air to become inflamed, the slightest movement of the inflamed portion will cause a cessation of the heart's action. The experiment will not succeed if made before inflammation has occurred, if the vagus is cut, or if the frog is under the influence of woorara.

W. A.

RESULTS FOLLOWING VARIOUS MODES OF TREATMENT OF DIPHTHERITIS (*Berliner Klin. Wochenschrift*, No. 40, 1875; by Dr. Theodor Schüler.)—These results are drawn from the observation of seventy-nine cases which were treated by Dr. S., forty-one of which were treated with chlorate of potassium, with six deaths, twenty-three with carbolic acid, with one death, and fifteen with salicylic acid, with seven deaths; lime-water being also energetically used in all. The patients varied in age from seven months to thirty years.

From these observations Dr. S. concludes that salicylic acid has at least no better effects than the other two remedies used, and, so far as his own practice is concerned, carbolic acid has more to recommend its use than salicylic. W. A.

THE TREATMENT OF LEUKÆMIA (*Centralblatt für die Med. Wissenschaften*, No. 42, 1875).—Dr. Ordenstein thinks that hereditary syphilis may play an important rôle among the causes of leukæmia, and has treated one case of the splenic form of this affection, in which the father of the patient had syphilis, with anti-syphilitic remedies with good results. Other modes of treatment had been tried with no good results, but the administration of Van Lincten's solution during several months was followed by the most surprising success.

W. A.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, JANUARY 8, 1876.

EDITORIAL.

NERVES AS CONDUCTORS.

A PROBLEM which is very interesting from a scientific if not from the so-called practical point of view is that which is expressed in the question, In what way do nerves transmit impulses? The hypothesis which has found most favor during the last few years is that of Brown-Séquard. This justly famous physiologist conceives that there is a special conductor for every special impression or form of nerve-recognition of an external agent: so that every complete nerve contains within itself at least eleven kinds of fibres, viz., conductors of impressions of touch, of tickling, of pain, of temperature, of muscular contraction, incito-motor conductors, incito-nutritive and secretory conductors, voluntary motor conductors, involuntary motor conductors, vaso-motor conductors, nutritive and secretory conductors. To these must be added four different nerve-fibres of the higher senses. Not content even with this complexity, Brown-Séquard writes, "I need hardly say that the number of functionally distinct nerve-fibres is probably much greater." In this assertion he is of course correct if his dominant idea be true, for in his list is found no room whatever for inhibitory nerves.

Space is wanting to enumerate the arguments brought forward by Brown-Séquard in favor of his conclusions. They may be plausible, but they certainly are not demonstrative; and the extreme complexity of such a system seems at variance with the usual physiological laws. Further, the known facts in regard to the union of divided nerves appear to be irreconcilable with this view of distinct fibres. More than thirty years ago, Flourens proved by experiments upon the lower animals that mixed nerves, when divided, will unite and recover their function if the end of the peripheral portion of one be brought in contact with that of the central part of the other; and surgeons to-day know full well that an ordinary nerve containing all sorts of fibres will unite perfectly after section. It is, to use a very mild term, in the highest degree improbable that the divided ends of individual nerve-fibres can seek out one another, or even that the eleven different sorts of fibres shall find their own kind. Further, the experiments of Vulpian and Phillipeaux seem to give the *coup-de-grâce* to the speculations of Brown-Séquard. They proved that a motor nerve may be made to unite physiologically as well as anatomically with a sensory nerve, an irritation of the motor nerve *above* the point of union giving rise to motion in the tributary muscles, and an irritation of the sensory nerve *below* the point of union producing pain.

Similar experiments have, it is true, failed in the hands of some other physiologists to give a similar result, but the positive results obtained by Vulpian and his colleague are hardly to be considered disproved by the negative results of other observers.

For the reasons just assigned, the theory of Brown-Séquard has never seemed satisfactory; but we confess to being greatly pleased by a new one by Dr. Robert McDonnell.* Its simplicity is as striking as is the complexity of the older view. Moreover, it is seemingly in accord with the accepted views of forces and their mode of action in the outer world, and brings nerve-force into a direct correlation with these outer influences. The theory is stated with sufficient fulness and clearness in the following passage, which we extract entire from the work of its author:

* Lectures and Essays, part ii. p. 220, Dublin, Fannin & Co., 1875.

"I conceive that the various peripheral expansions of sensitive nerves take up undulations or vibrations and convert them into waves capable of being propagated along nervous tissue. Thus the same nerve-tubule may be able to transmit along it vibrations differing in character, and hence giving rise to different sensations; and, consequently, the same nerve-tubule may, in its normal condition, transmit the wave which produces the idea of simple contact, or that which produces the idea of heat; or, again, the same nerve-tubules in the optic nerve which propagate the undulations of red may also propagate, in normal vision, those which excite the idea of yellow or blue; and so for the other senses."

MICHIGAN UNIVERSITY.

OUR readers will no doubt remember our editorial notice of Dr. Sager's charge that the Medical Faculty of the University of Michigan were really in collusion with and aided in the movement which fastened homœopathy upon the institution. We have received a letter from the Dean of the faculty, in which this charge is met by a denial in detail. The communication is entirely satisfactory, but is too long for our columns. Moreover, the gist of the matter is contained in the following extract from an official letter written to the Dean of the Faculty by one of the Regents, Dr. C. Rynd:

"No member of the faculty ever intimated to the undersigned, nor, so far as my knowledge extends, to any member of the Board of Regents, their willingness to accept any arrangement, or make any compromise, which would permit the establishing of homœopathy at Ann Arbor.

"The action of the Regents was the result of what they believed a necessity,—unavoidable in view of the dependence of the University upon the Legislature,—and not in any sense contingent upon the opinions or probable action of the Faculty.

"The Faculty did not enter into any agreement with the Medical Committee at the preliminary meeting on 7th of May last.

"The grant of six thousand dollars per annum for homœopathy would not have enabled the Regents to establish a homœopathic college, with a full corps of instructors. They did not wish to duplicate chairs for the teaching of fundamental or elementary studies, and appointed two homœopathic professors, thinking this would be better for the regular school, fairly satisfactory to the homœopathists, and in strict accordance with the intention of the Legislature.

"In a word, my dear doctor, as you may well know, the sole question to be settled by the Faculty was, whether it were wiser to 'accept the situation' and stand up for rational medicine, or 'step down and out.' The Regents did not propose to offer any different terms of settlement, and were prepared to meet whatever emergency might arise. Faithfully, and, I believe as time will demonstrate, wisely, you accepted the situation *in the presence of an accomplished fact.*"

A CENTENARIAN.

HENRY BOEHM, or, as he was usually styled, Father Boehm, died at Richmond, Staten Island, December 28. He was born in Lancaster County, in this State, June 8, 1775, and was therefore one hundred years, six months, and twenty days old at the time of his death. There seems to be no doubt in regard to these dates. In 1800 Mr. Boehm was ordained in the Methodist Episcopal Church, and became a very active preacher. On his hundredth birthday there was an elaborate celebration, in which he took an active part, submitting a detailed sketch of his life. The labor and excitement caused a severe illness, from which he rallied, but on the 12th of December, whilst preaching in the village church at Richmond, he was seized with fatal illness.

REMEDY FOR CHRONIC HOARSENESS (*Am. Practitioner*).—In chronic hoarseness arising from thickening of the vocal cords and adjacent membrane, the ammoniated tincture of guaiacum is often a very efficacious remedy. It may be mixed with equal parts of the syrup of senega, and a teaspoonful of the mixture given two or three times daily.

CORRESPONDENCE.

NEW YORK, December 16, 1875.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR,—At the time the two admirable clinical lectures on rupture of the perineum, by Dr. Goodell, were being published in the *Medical Times*, Prof. Thomas was also giving expression to his views on the same subject; and some note of them, therefore, may prove of special interest at the present time. At one of his Friday afternoon clinics at the College of Physicians and Surgeons a few weeks since there happened to be quite a number of cases of ruptured perineum, and, consequently, he made these the basis of a couple of didactic lectures on the subject, which he delivered during the succeeding weeks. According to Dr. Thomas, there is scarcely any subject in medicine or surgery so little understood by students, and even by many practitioners, and none so difficult to explain in a clear and satisfactory manner.

Anatomy and physiology of the perineum.—In the first place, what is given in the text-books as the perineum includes only the layers of muscles and the tissues external to them. The perineal body is really triangular in shape, and is composed, in addition to these, of hard, fibrous tissue extending as high up as the junction of the posterior wall of the vagina with the anterior wall of the rectum. In all the diagrams we are accustomed to see, the vagina is represented as distended, with the bladder held up in position by its anterior wall; but this is not the case. The vagina, under ordinary circumstances, is a closed sac, with its two walls in direct apposition; so that the bladder will therefore be seen to be dependent on the posterior wall for support.

Rupture of the perineum.—The normal curve of the posterior wall of the vagina is that of the letter C; but now let the perineum become destroyed, and it is changed to that of the letter S, with its lower portion terminating at the anus. Rupture may be described simply as the splitting of the perineal body. Here Dr. Thomas illustrated his meaning very nicely by means of a wooden model which he had designed, representing the sacrum and the rectum, with the triangular perineal body in front; the latter being composed of two pieces attached posteriorly by hinges, and which could therefore be separated for the purpose of exhibiting the splitting of the perineum, as the accident occurs during parturition.

Etiology.—The common causes are the following: A straight sacrum (this is certain to produce rupture); disproportion of the size of the head to the parts of the mother; too rapid delivery; posterior position of the vertex.

Prevention.—The accoucheur who supports the perineum the most will be found to have the largest number of ruptures in his practice; and next to him the one who does not support it at all; so that here, as in so many other cases, extremes meet. By supporting the perineum too long and constantly, we interfere with its physiological softening and distention. We read in Ramsbotham of a case where that distinguished obstetrician supported the perineum for eight hours continuously. It is not recorded whether the perineum was ruptured finally or not, but it certainly ought to have been under the circumstances. The true secret of success in conducting this part of labor is to really support the head and not the perineum. We ought to keep the head strongly flexed by pressure with the hand; also, forcibly preventing its too rapid delivery, and by no means permitting extension to take place until the occipital protuberance has passed the vulva. The delivery of the occiput can often be materially assisted by the hand, when necessary. The simple rules to be observed may, therefore, be stated as follows:

1. Keep the head with the sub-occipito-mental, instead of the occipito-mental, diameters presenting.

2. Let the head be delivered slowly; but do not keep up too much pressure on the perineum.

Results, immediate.—1. Infection through absorption of the fetid lochial discharge by the surfaces of the wound, leading to septicæmia. Thomas regards this as a common cause of puerperal fever, and thinks it a matter of surprise that more women do not suffer from it in consequence.

2. Subinvolution and consequent bagging of the vaginal walls.

Remote.—Prolapse of bladder.

Prolapse of walls of vagina.

Prolapse and other displacements of uterus.

When the bladder becomes prolapsed, it can never be thoroughly emptied by urination, and, consequently, the urine standing permanently in the lower segment of it undergoes ammoniacal degeneration, and gives rise to cystitis. In some rare cases the process of involution of the vagina is not at all interfered with by the rupture of the perineum, and then the anterior wall does in reality support the bladder, as the posterior also supports the rectum. The only trouble in such cases is incontinence of fæces, when the rupture extends through the sphincter ani. There was a case of this kind at the clinic before mentioned; the position and condition of all the organs being entirely normal, notwithstanding the fact that the perineum was completely ruptured.

Classification.—For the obstetrician there are three degrees of rupture: 1, superficial; 2, extending to the sphincter ani; 3, extending through the sphincter.

The gynæcologist is concerned with only the last two varieties. The tearing of the fourchette is not to be regarded as a rupture of the perineum at all. Some years ago one of the internes at Bellevue was said to have had an unusually large number of ruptures during his term of service in the lying-in wards, and, feeling rather sore on the matter, he made a bet with his successor that the latter would meet with just as many as he had done. Dr. Thomas, then one of the attending physicians, consented to be umpire in the case. The first rupture claimed, when examined by him, proved to be nothing more than that of the fourchette; and he decided, therefore, that it was not to be counted. The second and third cases proving also of the same character, he then explained that it was acknowledged by all authorities to be the rule for the fourchette to be torn in primiparous women; whereupon the first man stated that all his ruptures had been simply of this kind. Consequently, the bet was declared off.

Treatment.—The principal objections to leaving a ruptured perineum unrepaired after labor, as might be inferred from the foregoing points, are: that a raw surface remains for the absorption of decaying animal matter, exposing the patient to the risk of septicæmia; that the involution of the vagina is interfered with, leaving it large and baggy; and that the support to the anterior vaginal wall and the bladder is removed.

Shall we, then, operate at once? There is no absolute rule on this point, for we must be guided entirely by the condition and temperament of the patient, and the attendant circumstances of each case. Whatever course seems for the best interests of the parturient woman is to be pursued. If it is after a long labor, when there is much exhaustion or a tendency to hemorrhage, do not think of operating. Again, if the attendants are utterly worn out by their long-continued and arduous duties, it is better not to attempt an operation, lest a rebellion should be raised in the lying-in room. Disinfecting vaginal washes must then be relied on for the prevention of the absorption of septic material.

But if the labor has been short (not more than twelve hours, say) and the patient is in good condition, operate at once by all means. If, however, the rupture extends through the sphincter, we ought, as a rule, never to perform the immediate operation, because the chances are infinitely in favor of its failure. If, on the other hand, the perineum is only slightly torn, there is no use of sewing it up; for if it never heals it does not matter at all. It is only necessary to resort to the vaginal washes here. The general rule is, then, to operate at once in the vast majority of cases where the rupture extends down to the sphincter ani, and not to operate when it goes through the sphincter.

Prof. Thomas here made a digression to state his opinion in the most positive manner that rupture of the perineum does harm *only* as it interferes with the involution of the vagina, ligaments, uterus, and perineum itself. In a few instances involution goes regularly on after a rupture which has not been repaired by operation (as in the case of the woman at the clinic before alluded to), but this is certainly the rare exception. As proofs that the perineum may be ruptured with impunity when the parts are in their natural condition, he mentioned several cases in which he had performed operations involving it. In one instance he had extracted, by means of the forceps, a uterine fibroid as large as a child's head, tearing the perineum completely through to the sphincter in so doing; and, though the rent was never sewed up, there had not been the slightest bad result from it. In another case he had cut through the perineum in order to get at a fibroid, and this was frequently done for the relief of spasm of the vagina, and yet never attended by any unpleasant consequences.

Laceration of the cervix during labor also interferes with involution, and is generally followed by eversion of its lips; but operations about the cervix in the non-pregnant uterus are never followed by this result.

Dr. Thomas then went on to describe minutely and clearly Sims's operations for ruptured perineum when the sphincter ani is not involved and when this is the case; but it will not be necessary to repeat the various details here. When the remote operation is to be performed, it is necessary that the bowels should be thoroughly evacuated; and, in order to accomplish this, we should begin a week beforehand with small doses of some efficient cathartic that acts on the whole intestinal tract. For the operation four assistants are demanded: one to administer the ether (and not to attempt to look at the operation in addition), two to support the limbs in position (it being the duty of one of these to sponge also), and one to change the sponges and hand such articles as may be needed. In paring the triangles on each side, the operator is to be guided by the outlines of the cicatricial tissue.

Dr. Thomas does not hesitate to use the silk ligature on any arterioles that bleed, believing that this substance does not interfere in the slightest degree with the process of healing. He illustrated the first operation (where the sphincter ani is not involved) very happily by means of the wooden model mentioned above; holes having been bored through the pieces representing the perineal body, at the points where the silver-wire sutures were to be put.

Every physician who practises obstetrics, he said, ought to be able to perform this operation, and he was therefore the more anxious to make it perfectly understood.

The operation for the restoration of the

perineum when the sphincter is involved he believes to require absolutely more skill than that for vesico-vaginal fistula, or than ovariotomy. One very important point in commencing it is to find out accurately the position of the two ends of the torn sphincter muscle (which become more and more widely separated according to the time that has elapsed since parturition), as the first two or three sutures should be made to follow the laceration entirely around, enclosing the anus in a splint, as it were, and thus bringing these ends in contact once more. To illustrate this operation, Dr. Thomas made use of two india-rubber tubes joined together, one representing the vagina, and one the rectum; having first slit up the septum between them.

In the year 1870 Dr. Thomas read a paper on "*Gastro elytrotomy:* a Substitute for the Cæsarean Section," before the Yonkers Medical Association, which was afterwards published in the *American Journal of Obstetrics* for May of that year. From it we learn that he had for a long time been waiting for an opportunity of essaying the operation, and had twice experimented upon the non-pregnant cadaver before he discovered that the idea which he supposed had originated with himself had, in reality, been suggested many years before. In 1820, Ritgen, of Germany, proposed gastro-elytrotomy to the profession, the operation consisting of the following steps. 1. An incision extending from the spine of the pubis to the anterior superior spinous process of the ilium was made through the abdominal walls. 2. The loosely-fitting peritoneum was lifted by the fingers until the vagino-uterine junction was reached. 3. This was cut through. 4. Delivery was accomplished through the opening thus made. The idea of thus opening the vagina instead of the uterus was not original with Ritgen, however, for in 1806, according to Kilian, Jörg proposed the same procedure, with the exception of that part of it intended for the avoidance of the peritoneum. Singularly enough, the idea seems to have occurred almost simultaneously to Physick in America and to Baudelocque in France, about the time when Ritgen conceived it. Before Thomas performed it, it had been attempted in only two instances, so far as is known,—once by Ritgen, and once by Baudelocque; though the latter abandoned it for the Cæsarean section. In February, 1870, Dr. Thomas, in the presence of a number of medical friends, performed gastro-elytrotomy on the cadaver (eight hours after death), and it was the remark of all present that, had the child been alive at the commencement of the operation, no influence was developed during its performance which could have injured it. Within a month afterwards he performed this operation, in the interest of the child, on a woman seven months advanced in utero-gestation, who was *in articulo mortis* from an attack of pneumonia. The child was born alive, but was hare-lipped and badly developed, and died in about an hour. The mother, the wound in whose abdomen was closed by interrupted sutures, lived for about the same length of time. Since then he has not met with an appropriate case in which to repeat the procedure.

In the mean while, however, the operation has been twice performed by Dr. Alexander Skene, Professor of Diseases of Women in the Long Island Hospital College, Brooklyn. In the first case craniotomy had already been performed, and the operation was undertaken as a last resort, to save the mother. The second case, which occurred last month, was eminently successful in every way, and reflects the greatest credit upon the operator. If we are correctly informed, the child, which actually weighed ten pounds, is alive and well to-day, and the mother has made a perfect recovery.

Gastro-elytrotomy would seem to be attended by fewer and less grave dangers for the mother, as it unquestionably is for the child, than the Cæsarean section; and it is to be hoped, therefore, that the operation, as occasion may arise, will be given a more extended trial.

On the 18th of November the Academy of Medicine celebrated its twenty-eighth anniversary,—the first that has occurred since moving into its new home. The annual address was by Dr. E. Darwin Hudson, and, though somewhat general in character, was interesting for the most part, and often amusing.

The last paper read before the Academy was by Prof. Austin Flint, Sr., on "Functional Disorders of the Heart, characterized by Notable Infrequency of the Pulse."

At the November meeting of the County Medical Society, Prof. Sands assumed the presidency for the second time, and Dr. T. E. Satterthwaite, who, in company with Dr. Curtis, was appointed by the Board of Health last winter to investigate the subject of diphtheria (the sum of $2000 being appropriated for the purpose), read an extended paper on the subject of "Bacterial Organisms, their Nature and Relations to Certain Diseases." Like so many other observers, he has found them in the human body, in health as well as in disease, from the mouth to the anus; and he finds it impossible, therefore, to regard them as the active agents in the causation of those diseases with which they have been so frequently associated. From a number of original experiments he has found that they are totally destroyed by such substances as salicylic acid; but after the bacteria had been thus destroyed in any infectious matter, the latter has proved to possess the same power as before, the activity of the virus being entirely unimpaired. He concludes, therefore, that such agents as salicylic and carbolic acids are not properly disinfectants at all,

but are to be regarded simply as anti-microphitics.

At the Medical Journal Association, Dr. Alfred Carroll has read an excellent paper on the general treatment of the lithæmic diathesis. There was nothing specially new or original in it, but it was a concise and admirable *résumé* of the subject, and showed familiarity with the views of Murchison, particularly as expressed in his "Functional Diseases of the Liver." The treatment practically resolved itself into three points, viz.: 1. To regulate the diet properly. 2. To promote oxidation. 3, To assist elimination.

Dr. Carroll has devised a very simple arrangement for keeping the last drop of any specimen of urine for microscopic examination, which he exhibited on this occasion, and which seems likely to prove quite useful. This consists of a glass tube open at both ends, one of which, however, can be closed at will, so that it will hold liquids, by means of an ordinary round microscope glass slip; the latter being held in position by a little rubber ring a quarter of an inch wide.

At the last reunion, the paper was by Dr. J. Langmann, on the Pneumatic Treatment, and in it he gave the history of the subject from the time when Henshaw, of England, in the sixteenth century, proposed a plan by which patients could procure a change of air without going away from home. His idea was to use inhalations of condensed air for acute diseases, and rarefied air for chronic. The speaker then described some of the devices invented by French and German authorities for the employment of this treatment in modern times, and exhibited a number of forms of improved apparatus which have now superseded the cumbrous and expensive pneumatic cabinets formerly in use. The advantages claimed for the method in diseases of the chest are, that it increases the ventilation of the lungs, the vital capacity, and the respiratory force. The annual meeting of the Association was held December 7, when Dr. Loring was elected President, in the place of Dr. Peaslee.

At the last meeting of the Medico-Legal Society, Mr. Clark Bell resigned the chair, which he has occupied for several years, to the President-elect, Dr. Frank Hamilton, and in the course of his retiring address suggested that it would be a desirable thing for the Society to appoint a commission, similar to that in Paris, for the purpose of examining into abstruse questions of medical jurisprudence, and thus facilitating the action of the courts in such matters. Dr. Hamilton's address was on "The Effect of Loss of Consciousness on the Memory of Preceding Events."

The case of excessive lateral curvature of the spine in which Dr. Sayre made a subcutaneous section of the latissimus dorsi muscle has, under the careful after-treatment carried out, been a complete success, affording abundant proof of the correctness of the surgeon's predictions in a matter in which the test of experience had not been hitherto applied. Of course, it has been impossible to correct the shape of the distorted ribs; but any one who saw the terrible deformity of which the patient was the subject in October, would certainly be astonished to behold the very admirable result that has now been achieved. Since then, another similar case has been under treatment, but, owing to ill health, Dr. Sayre was unable to perform the operation himself. Prof. Crosby, therefore, at his request, made the section of the muscle; and the result in this instance also has proved eminently satisfactory.

At one of his clinics some little time ago, Dr. Sayre presented a case of chronic inflammation of the ankle-joint, which, he said, was one of the kind that suggested to him the idea of giving the lecture he delivered last season on "The Disadvantages of Not Breaking Your Leg," in which he showed that slight accidents often result in the greatest and most permanent injury. The patient hardly thinks it worth while to call in a doctor, and so the trouble goes on extending, while if there had been a fracture, or other serious injury, at first, it would have been promptly attended to by a competent surgeon, and a good recovery obtained. In the present case, the injury had been very trifling at first; but the patient had now suffered agonies from it for years. There was enormous swelling, with thickening of the tissues, the joint measuring seventeen inches in circumference at the largest part. The instrument applied in this case consisted of a steel sole with a rod capable of extension and shortening by means of a key, reaching from the heel up the back of the leg to the largest part of the calf, where it was attached to a metallic band snugly fitting the limb, while from the anterior part of the sole rose a stirrup over the foot, and to this was attached another rod, similar in character, which passed up to the metallic band in front. The whole was kept firmly in place by means of adhesive strips and bandages; the seat of injury having also been previously strapped tightly with adhesive plaster, with a view of causing the absorption of some of the effused fluid, if possible. The foot was extended by means of a key applied to the steel rods mentioned, and by this means the weight was lifted altogether from off the astragalus. The patient, being thus rendered entirely comfortable, was now enabled to walk without the assistance of either cane or crutches. On account of his enormous weight, however (which he said was 270 pounds), this was not to be permitted, as it would have been too great a strain on the adhesive strips.

On the evening of November 30, one of the largest and most representative meetings of the profession seen here for several years was held at the Union League Theatre, in answer

to a call from a number of the most eminent medical men in the city, to all their fellow-practitioners who believed that the action of the Board of Managers of the Presbyterian Hospital last spring was injurious to the success of hospitals in their beneficent work. The greatest enthusiasm prevailed, and after addresses by Profs. Thomas, Agnew, William H. Thomson, James R. Wood, and others, the following resolutions, with a preamble giving an account of the difficulty at the hospital, were unanimously adopted:

"*Resolved*, That we believe that the four gentlemen dropped from the medical staff have not been treated with common justice.

"*Resolved*, That no medical man should place himself in a position from which he might be dismissed without charges preferred or hearing allowed.

"*Resolved*, That the profession heartily approve of the action of those members of the medical staff who have resigned their positions, and thus refused to countenance an injustice done to fellow-members of their profession.

"*Resolved*, That, while the profession fully appreciate the great and wise beneficence of the founders and supporters of the Presbyterian Hospital in their efforts to secure a place of relief for the suffering poor, we deplore the treatment of the members of our profession which has so much impaired the usefulness of what promised to be a great charity.

"*Resolved*, That, in consideration of the primary importance of the relations of the medical profession to all hospitals, it is the sense of this meeting that similar occasions of disagreement between the boards of directors of hospitals and their medical staff, as well as grave faults in the management or in the construction of hospitals, can be avoided only by an adequate representation of the medical profession in the membership of the boards of directors." PERTINAX.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, OCTOBER 28, 1875.

The PRESIDENT, DR. WM. PEPPER, in the chair.

Follicular ulceration of the larynx concurrent with phthisis. By Dr. J. SOLIS-COHEN.

THE larynx and trachea were removed from a young man 26 years of age, who had died of extensive tuberculosis, after an illness of about eighteen months. The entire lungs were so riddled with cavities and broken-down tissue that hardly a cubic inch of healthy lung could be found at any one point. The larynx exhibited the not unusual marks of follicular ulceration at the base of the epiglottis, about the arytenoid cartilages, and so on; but the point to which attention was directed was the condition of the vocal cords, which had become transformed into huge firm folds, larger in volume than those which represent the ventricular bands, or so-called false vocal cords.

Epulis with associated alveolus. By Dr. H. ALLEN.

The growth was removed from the right side of the lower jaw of a female 56 years of age. It was of the size of a plum, but formed two partially distinct masses, one of which lay within the alveolo-lingual groove, the other behind the lower lip at a point answering to the right lateral incisor tooth. Farther to the right side the jaw was edentulous. The tumor had proved recurrent, since its form, as shown in the specimen, had been the only result secured after three ablations. In none of these had any excision of the alveolus been practised.

The specimen was referred to the Committee on Morbid Growths, which reported, November 11, 1875, as follows:

"The epulis removed by Dr. Allen belongs to the sarcomatous group of tumors. The growth is of only moderately firm consistence, lobulated, and devoid of any bony or calculous plates.

"Microscopically, your committee find that the greater portion of the tumor is formed by small round cells, with very large nuclei and little or no protoplasm. The intercellular substance is freely developed, generally finely granular, but at a few points fibrillated. Spindle cells also exist to a limited extent, while only at great intervals are detected multinuclear giant or myeloplastic cells. Thin-walled blood-vessels are abundantly present."

Tumor from the mandible of a cow. By Dr. H. ALLEN, for Dr. JOHN PAXSON, of Jenkintown, Pa.

The tumor had grown upon the mandible of an Alderney cow.

Dr. Paxson was inclined to the opinion that the mass was cancerous. It is presented more particularly for reference to the Committee on Morbid Growths, for determination of its nature.

The tumor was referred to the committee, which reported that in consequence of its imperfect preservation it was unfit for examination, and nothing could be determined as to its nature.

Mitral stenosis. By Dr. WM. PEPPER.

V. E. F., suffered with rheumatism in childhood, and again while in the army in 1862, after coming to this country. First came under observation in 1874, with typical symptoms of mitral stenosis; strong auriculo-systolic murmur at apex, distinct thrill, auricular impulse, increased area of cardiac dulness, frequent attacks of pulmonary congestion, with occasional hæmoptysis or epistaxis.

Later, he suffered from violent paroxysms of cardiac disturbance, with œdema, orthopnœa, etc. These were usually controlled in a most remarkable manner by large doses of digitalis. In some instances, copious epistaxis seemed to be followed by very rapid relief to symptoms. Finally, symptoms of cardiac failure became more persistent, and he died in the latter part of October.

Autopsy.—Hemorrhagic infarctions in lungs; a few small emboli in kidneys and spleen; liver congested.

Heart enlarged, weight 18 oz. Left auricle had a capacity of f℥viij, with much thickening of walls. Right auricle not so much dilated, but marked thickening of muscular wall. Left ventricle was the seat of marked hypertrophy, with some dilatation. The mitral valve was contracted so as barely to admit first joint of little finger, and projected as a dense, rigid, funnel-like body into the cavity of the ventricle. Aortic valves competent. Right ventricle showed extreme hypertrophy of columnæ carneæ, and general thickening of the muscular walls. Tricuspid valve apparently competent, the leaflets being enlarged but otherwise healthy.

Dr. C. B. NANCREDE asked whether the relief afforded by the hemorrhages could be attributed to the loss of blood.

Dr. PEPPER replied that he believed it was due to them, and not to the action of the drugs administered, because instances of this kind of relief had occurred before the patient's admission to the house.

Dr. NANCREDE said he had asked the question because cases had come under his observation in which, after taking blood, the prompt absorption of digitalis in consequence of it had been followed not only by its physiological effect, but also by alarming toxic results.

Dr. PEPPER thought the case afforded a most important illustration of the good effects of venesection in certain cases where there is a damming up of the blood and consequent obstruction to the pulmonary circulation, the effect of withdrawal of blood enabling its movement to be stronger and more active.

REVIEWS AND BOOK NOTICES.

ATLAS OF SKIN DISEASES. By TILBURY FOX, M.D. Philadelphia, Lindsay & Blakiston.

This new pictorial venture is to be completed in seventeen or eighteen parts, each of which is to contain four folio plates. Some of the illustrations will be original, and others copies of the classic publication of Willan and Bateman. The name of Dr. Fox is a guarantee that the work will be well done, and that American physicians who desire illustrations of the skin diseases of the Old World will find in this Atlas an accurate representation, which they may contrast with what they see around them.

GLEANINGS FROM EXCHANGES.

THE ACTION OF COD-LIVER OIL (*The Practitioner*, December, 1875).—Buchheim maintains that the old opinion, that cod-liver oil was valuable as a curative agent in consequence of the iodine that it contains, is unreliable, since it contains actually less and not more iodine than other marine products, as deep-sea fish, oysters, etc.

The view also that it aids in the formation of some of the constituents of the bile meets with little favor. It would appear, rather, that the value of cod-liver oil is due to its being an easily digestible fat of high nutritive value. Buchheim finds that the oil has an acid reaction, and contains, in addition to the fatty glycerides, free fatty acids (oleic, stearic, and palmitic), the quantities of which vary in the different kinds of oil, but amount in the clear variety to about five per cent. No biliary matters are present in the oil. Its value, according to Buchheim, depends on the presence of the free fatty acids, since the absorption of fats is preceded, to a certain extent, at least, by their disintegration into glycerin and fatty acids, and as the latter are introduced in cod-liver oil in their free condition, and thus easily unite with the alkalies of the intestinal juices to form soluble and easily absorbed soaps and combinations, a part of the digestive work is spared, which is of importance for weak persons with deficient power of producing the gastric juices.

When cod-liver oil cannot be taken, the use of the free fatty acids is indicated, and these might be advantageously ordered without any admixture of glycerides. Unfortunately, however, stearic and palmitic acids are solid at the ordinary temperature of the body, whilst oleic acid, though fluid, easily becomes rancid, and can at present be obtained only in small quantities.

THE COLORING-MATTER IN TRAUMATIC ICTERUS (*The Medical Record*, December 18, 1875).—According to M. Poucet, traumatic icterus is due to the resorption of the coloring-matter of the blood. The coloring-matter is, in this case, modified or reduced hæmoglobin, that is, hæmogolobin deprived of its oxygen. The spectral analysis of an ecchymotic liquid shows a peculiar characteristic band of reduced hæmoglobin. This liquid, treated with ether, gives a yellow coloring-matter, which is separated from the hæmoglobin, and is the same that gives to the integument its icteric tint.

ON FISSURE OF THE NECK OF THE BLADDER AND RAPID DILATATION OF THE URETHRA IN WOMEN (*The Medical Record*, December 18, 1875).—Prof. Spiegelberg, of Breslau, insists upon the advantages of rapid dilatation of the female urethra, for purposes of accurate diagnosis and radical cure of various affections of that region. He claims that the inflammation

of the mucous membrane and the incontinence of urine, which have been found so troublesome after gradual dilatation, are avoided in this mode of treatment. The dilatation can be carried up to almost an inch without risk; but it should be practised under chloroform, because of the pain it occasions and to avoid injury from sudden movements of the patient. The process occupies about a minute, the urethra being first moderately and then vigorously stretched. He uses Busch's uterine dilator, removing the upper branch, while for mere inspection Simon's specula will suffice. He has successfully employed this method in treating a polypus of the neck of the bladder, and even in evacuating the fluid in a case of hæmatometra, but regards it as specially applicable to the treatment of fissure of the neck of the bladder, of which he reports two cases successfully treated. This affection he regards as wholly analogous to fissure of the anus, both often following confinement, involving annular muscles, and requiring the same treatment. The pain and spasmodic contractions are more constant in vesical than in anal fissure, because the urine as it accumulates comes at once into contact with the raw surface, while there is always an interval before the fæces reach the sphincter in their descent. As a method of diagnosis this obviates the danger of mistaking the affection in question for a cystitis, a urethritis, or a simple neurosis.

ENLARGED PROSTATE MISTAKEN FOR CALCULUS (*The Richmond and Louisville Medical Journal*, November, 1875).—In an adult who had all the usual symptoms of calculus, a careful examination was made, and the characteristic sound occasioned by striking the sound against a hard body was distinctly heard by several persons, and the existence of a stone undoubted. The lateral operation was performed; the bladder was opened, but the forceps, several times introduced, brought away nothing but clots of blood. An encysted stone was suspected, but the operation was discontinued. Nevertheless, the pains which the patient previously experienced ceased for some months, after which they recurred with greater violence; difficulty of micturition increased; the urine became ammoniacal; fever set in; and the patient died six months after the operation. On post-mortem examination the prostate was found enlarged, composed of tough fibrous tissue, very horny on section, and when struck with a sound gave the same sensation as was experienced during life.

CROUP AND DIPHTHERIA (*The Lancet*, November 13, 1875).—In the discussion on this subject at the Royal Medical and Chirurgical Society, Sir William Jenner said that he had for a long time held that croup and diphtheria were distinct diseases, but that he had been compelled to alter his views for the following reasons:—1. Albuminuria, a symptom held to be characteristic of diphtheria, he had seen in genuine "croup,"—croup coming on with catarrh, with no exudation in the pharynx. He had seen several times in such cases the urine loaded with albumen. 2. He had seen a surgeon in attendance on a case of diphtheria contract laryngo-tracheal membranous disease, and, moreover, in that case the paralytic sequelæ followed. 3. Then the *sthenic* character of croup was not distinctive, for some cases of membranous pharyngitis (diphtheria) presented as great force of febrile disturbance as he had ever seen; and, speaking generally, he could not believe that diphtheria was so asthenic as commonly taught. He thought it was quite an *a priori* view to assume that bleeding would be necessarily fatal in such cases. Then the fact that paralytic sequelæ never or rarely followed croup was easily explained, because as soon as diphtheria attacks the larynx recovery is infinitely rare. With respect to the distinction between croup and diphtheria as to *cause*, he stated that he had met with cases of true diphtheria which undoubtedly came on from exposure to cold, and he quoted two instances of this. Finally, he could not see a single reason for believing in the non-identity of the two affections.

ON THE ANALOGIES OF DISLOCATIONS OF THE SHOULDER- AND HIP-JOINTS, AND THE METHODS OF REDUCING THEM (*London Med. Record*, September 15, 1875).—Dr. Kocher contributes, in Volkmann's *Sammlung Klinischer Vorträge*, an article in which he bases the methods of reduction of dislocation of the shoulder and hip on the anatomical structure of the joints. He remarks that these joints possess several points of analogy, especially in their ligamentous apparatus. The Y-ligament of the hip-joint, which proceeds from the anterior inferior spine to the linea intertrochanterica, and is connected with the zona orbicularis, has its analogue in the coracohumeral ligament, which, arising from the coracoid process, divides into two branches, one of which is inserted into the greater tuberosity, the other into the lesser tuberosity of the humerus. From both these branches fibres proceed to the capsule, and perform the same functions as the orbicular ligament. These anatomical analogies indicate a similar mode of reduction. The dislocations of the shoulder and hip are essentially either forwards or backwards.

1. In dislocations upwards and forwards (subcoracoid and ilio-pubic), the special movement for reduction is flexion, which in the case of the shoulder must be preceded by strong rotation outwards, while in the case of the hip this has already been done. After flexion, rotation inwards and extension follow. In the hip, extension follows immediately on flexion.

2. Dislocations downwards and forwards (axillary and obturator) require rotation out-

wards, which must be preceded by flexion and traction.

3. Dislocations downwards and backwards (infraspinous and sciatic) require rotation inwards, flexion, traction, and finally rotation outwards.

4. Dislocations upwards and backwards (sub-acromial and iliac) require flexion or the utilization of that already existing, traction, and rotation inwards.

The methods under consideration are essentially those of elevation and rotation. Elevation serves either for relaxation of the stretched portions of the capsule (the ilio-femoral ligament by flexion, the coraco-humeral ligament by flexion and abduction) or for stretching them so as to form a firm point for leverage.

Irregular and old dislocations require somewhat modified procedures.

The use of chloroform in the reduction of dislocations should be limited, according to Kocher, as muscular contraction may often be useful.

TREATMENT OF WHOOPING-COUGH WITH CARBOLIC ACID VAPOR (*The Doctor*, November 1, 1875).—Dr. Burchardt writes that he uses the stream of a solution of carbolic acid in water (1½ to 2 parts of acid in 100 parts of water) for inhalations three times a day, with perfect and speedy success, in the treatment of whooping-cough. The same inhalations may also be used with great advantage in other affections of the respiratory organs.

EXTRA-UTERINE FIBROID OF LARGE SIZE—REMOVAL BY GASTROTOMY—HYPERPYREXIA—ICE-BATH—RECOVERY (*The Medical Press and Circular*, December 1, 1875).—Dr. C. H. F. Routh reports the case of a young lady who suffered from a gigantic uterine fibroid, which had made its appearance three years back. It was of stony hardness, reaching to the epigastrium, free from murmur, but transmitting cardiac sounds. It appeared to be made up of several parts. Uterus could not be felt distinctly in usual position; it was evidently displaced. Os was high up beneath pubes to left side. Whole of Douglas's space occupied by the tumor. The galvanic current temporarily diminished its size, but it soon enlarged again, and after a little delay, due to her general condition, it was decided to operate. She then had hydrothorax, ascites, and anasarca of lower extremities. The tumor was removed by the actual cautery, on the 16th of June. The result, as regards the temperature of the patient and the subsequent treatment, is so important that we give it in full:

June 16.—11.15 P.M., axilla 102.2°.

17th.—3 A.M., axilla 103.6°, pulse 144; 7 P.M., 101.2°, pulse 144; 11.20, 100.1°, pulse 124; 4.15, 101°, pulse 128; 12, 100.2°.

18th.—4 A.M., axilla 100.2°, pulse 128; 7.30, 100.2°, pulse 128; 12, 100.4°, pulse 124; 4 P.M., 100.2°, pulse 124.

19th.—3 A.M., axilla 102.4°; 7.30, 101.2°, pulse 134; 11, 100°, pulse 134; 3.24, 101.4°, pulse 144; 6, 100°, pulse 144; 9, 100.6°.

20th.—8.30, axilla 100.8°, pulse 144.

21st.—1 A.M., axilla 100.4°; 5.30, 100.8°, pulse 124; 12, 100°; 4.35, 101.6°, pulse 128; 9, 101.6°, pulse 128.

22d.—1.30, axilla 101.4°; 4, 100.4°; pulse 120; 12, 102°, pulse 124—no sickness, but tendency to cough; 6.30 P.M., 103°; 10.30, 102°, pulse 126.

June 23.—On this day the temperature, which at 1 A.M. and at 4 in the axilla had been only 102°, began to rise rapidly. At 8 it was 105° in the axilla. The patient became delirious; face pallid and collapsed; talking nonsense; pulse 144. A full examination was now made per vaginam. Nothing was revealed abnormal there except intense heat, which was measured by the thermometer at 107°. In the course of an hour it was 106.4°, but, the objective symptoms continuing the same, she was placed bodily in an ice-water bath.

In less than a quarter of an hour she became more conscious, and recognized her attendants. The giddiness disappeared. She was kept in for three-quarters of an hour, when temperature in vagina was 100°, in mouth 100.1°; pulse 124, stronger; and she was quite herself again. She vomited a little after coming out of the bath. About a quarter of an hour after, pulse fell to 116. Temperature was 97° in axilla. She was well kept up with raw beef-juice and brandy. The temperature continued low for the following day, 99°; pulse as low as 93; but the temperature gradually rose the following days, till it had risen in the vagina to 104° on the evening of June 30, with a pulse of 120; her countenance became again more anxious; she once more became delirious, pale, and sick. A vaginal examination revealed an enlargement about the size of a walnut between the vagina and rectum, high up, but no fluctuation whatever could be detected in it. She was placed a second time in an ice-water bath, which reduced the temperature to 99°, and although for some days after it occasionally rose to 103° in vagina, this was exceptional, pulse varying from 99 to 116.

On the 4th of July, the temperature in the vagina having risen to 104.2°, pulse to 112, and patient feeling very restless, a careful examination of the indurated portion in the vagina was again made. Fluctuation was evident; an incision with the trocar was therefore made into it. About five ounces of intensely fetid, grumous, bloody pus was removed with the aspirator, and the cavity washed out with weak iodine. Pulse fell to 86 same day, and temperature to 99.7° in armpit and 102.4° in vagina.

On the 7th of July the temperature again began to rise to 104° in vagina; pulse was 114. A vaginal examination revealed the re-formation of this abscess, which was now opened

per rectum, and a drainage-tube kept in. After rather a protracted illness, the patient recovered. The temperature never rose beyond 102° in the vagina, and after the 12th kept steadily at about 99°.

DILATATION OF THE FEMALE URETHRA (*The Lancet*, December 11, 1875).—Mr. Christopher Heath states that, failing to cure cases of painful micturition in women by other means, he adopted the plan of rapid dilatation of the urethra with the finger guided by a director, in some cases using a pair of ordinary polypus-forceps to commence the dilatation. His idea was that, in some cases, there was a fissure of the mucous membrane analogous to fissure of the anus, but this he was never able to prove, though the rapid dilatation almost invariably produced a tear in the subpubic portion of the mucous membrane, which might, in some cases, be the continuation of a fissure. He has never seen permanent incontinence result, though his patients have often been unable to retain the urine for twenty-four hours. He has always been content with the introduction of one finger.

In cases of chronic cystitis, with purulent urine, he has detected, as he believes, an ulcerated condition of the mucous membrane (for with the left forefinger introduced into the bladder, it is easy, with the other hand, to bring the whole of the mucous membrane into contact with it), and has then applied a strong solution of nitrate of silver by means of a mop, securely fastened on a wire, and passed through a small vulcanite speculum introduced into the urethra. The effect of this has been, in many cases, to render the urine acid and clear in twenty-four hours, and the tolerance of the remedy by the bladder is remarkable. The solution employed has been as strong as three drachms to the ounce, and he has never seen any harm follow even where little permanent good was done.

CHRONIC AORTITIS (*The London Medical Record*, September 15, 1875).—M. Jousset asserts that chronic aortitis is a common affection, and is habitually mistaken for and confounded with an affection of the heart, or with interstitial nephritis. He asserts that this is true only of the form which is not painful,—the variety which is characterized by pain being true angina pectoris. He continues:—Chronic aortitis sometimes succeeds acute aortitis. In this case all the causes of the latter affection operate; the use of alcohols, tobacco, coffee and tea, are the etiological circumstances which favor the development of chronic aortitis. All the patients in whom he has observed it were gouty or suffered from hemorrhoids, and were over thirty-five years of age. The principal symptoms are habitual dyspnœa, and from time to time severe attacks of suffocation. These acute attacks have the characteristics of cardiac dyspnœa. The pulse becomes quicker and smaller at the same time, and ends by disappearing. A lypothimic state is present, with cold perspirations, and sometimes complete syncope. During the attacks, expiration is convulsive and prolonged. Insomnia, loss of strength, and anæmia are the remaining symptoms of aortitis; they lead to cachexia characterized by œdema, albuminous urine, and sub-delirium. Death supervenes by asphyxia, syncope, or uræmic accidents. The physical signs are divers modifications in the aortic sounds, the constant formation of a plateau in the sphygmographic traces, and, at an advanced stage, the increase of aortic dulness.

MISCELLANY.

HARD ON THE PROFESSION.—A lay contemporary says that "America has one physician to every eight hundred inhabitants. That is, they begin on that basis, but after that there are not so many inhabitants."

A SCHOOL OF MEDICINE FOR WOMEN is to be opened in Brussels in December.

MILAN enjoys a cremation sensation, according to the Milan *Pungolo*. The body of the chevalier Albert Keller was consumed, with solemnities, *secundum artem*, in the presence of municipal officers and partisans of this method of disposing of the dead. Palasciano was there from Naples, Prof. Coletti from Padua, Dujardin from Geneva, Musato from Venice, and other celebrities.—*The Clinic*.

THE Anstie Memorial Fund is stated to have reached £2500 sterling. Of this sum about £1000 have been subscribed by the general public, the remainder by the profession.

MR. WILLIAM ACTON, the English surgeon, was recently found dead lying across his bath. About an hour previously he had been seen in his bedroom, and made no complaint of ill health. Fatty heart was found at the autopsy.

SMALLPOX is epidemic in Cincinnati.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM DECEMBER 19, 1875, TO DECEMBER 31, 1875, INCLUSIVE.

WHITE, CHAS. B., SURGEON.—Assigned to duty at Columbus Barracks, Ohio, as Post-Surgeon. S. O. 264, A. G. O., December 17, 1875.

COWDREY, S. G., ASSISTANT-SURGEON.—Assigned to duty at Jackson Barracks, La. S. O. 232, Department of the Gulf, December 18, 1875.

MERRILL, J. C., ASSISTANT-SURGEON.—To report to Commanding General, Department of Texas, for assignment to duty. S. O. 264, c. s., A. G. O.

BARNETT, R., ASSISTANT-SURGEON.—Assigned to temporary duty at Jackson Barracks, La. S. O. 232, c. s., Department of the Gulf.

TORNEY, G. H., ASSISTANT-SURGEON.—Assigned to duty at Post of Pineville, La. S. O. 232, c. s., Department of the Gulf.

ROSSON, R. L., ASSISTANT-SURGEON.—Assigned to duty at Camp McDowell, Arizona Ty. S. O. 108, Department of Arizona, December 11, 1875.